

AMENDMENTS TO THE CLAIMS

This following listing of claims replaces all previous versions of the claims in this application.

Listing of Claims

1. **(Original)** A polynucleotide comprising:
 - a) a first nucleic acid encoding a CD8 α -chain operably linked to nucleic acid encoding a transmembrane polypeptide; and
 - b) a second nucleic acid comprising a therapeutic gene of interest; and
 - c) at least a first transcription and translational control element for directing expression of said first and second nucleic acid.
2. **(Original)** The polynucleotide according to claim 1, wherein said nucleic acid encoding a CD8 α -chain has greater than 80% sequence identity to the nucleic acid encoding the human CD8 α -chain as set forth in Figure 1 (SEQ ID NO:2).
3. **(Original)** The polynucleotide according to claim 1, wherein said nucleic acid encoding a CD8 α -chain has greater than 80% sequence identity to the nucleic acid encoding the mouse, rat, or porcine CD8 α -chain as set forth in Figure 1 (SEQ ID NOS:8, 10, 12, 14, 20 and 24).
4. **(Original)** The polynucleotide according to claim 3, wherein said nucleic acid encoding a CD8 α -chain comprises the mouse, rat, or porcine CD8 α -chain as set forth in Figure 1 (SEQ ID NOS: 8, 10, 12, 14, 20 and 24).
5. **(Original)** The polynucleotide according to claim 1, wherein said CD8 α -chain comprises the sequence selected from the group consisting of the sequences set forth in Figure 1 (SEQ ID NOS:1-26).
6. **(Original)** The polynucleotide according to claim 1, wherein said CD8 α -chain lacks the intracellular domain of wild-type CD8 α -chain.
7. **(Original)** The polynucleotide according to claim 1, wherein said therapeutic gene of interest is selected from the group consisting of hemoglobin- β , GATA-binding protein, d-aminoevulinate synthase, glucose-6-phosphate-dehydrogenase, Coagulation Factor VIII, Coagulation Factor XI, cystic

Coagulation Factor XI, cystic fibrosis transmembrane conductance regulator, ornithine carbamoyl transferase, α -L-iduronidase, iduronate-2-sulfatase, β -lucosidase, α -galactosidase, galactosylceramidase, acid α -glucosidase, hexamidase A, phenylalanine hydroxylase, collagen type IV, $\alpha 5$, Bloom Sundrome Gene Product, and low density lipoprotein receptor.

8. **(Original)** The polynucleotide according to any one of claims 1 to 7 wherein said polynucleotide comprises a vector.

9. **(Original)** The polynucleotide according to claim 8, wherein said vector is selected from the group consisting of a recombinant adenovirus, a recombinant retrovirus, a recombinant adeno-associated virus, and a recombonant herpes virus.

10. **(Original)** The polynucleotide according to claim 9, wherein said vector is replication defective.

11. **(Currently amended)** A composition comprising the polynucleotide according to any one of claims 1, 2, 3, 4, 5, ,6 or 7, further comprising liposomes.

12. **(Withdrawn)** A method for reducing immune response against antigens derived from a gene therapy delivery system comprising:

a) contacting a cell with said gene therapy delivery system, wherein said gene therapy delivery system comprises:

i) a first nucleic acid encoding a CD8 α -chain operably linked to nucleic acid encoding a transmembrane polypeptide; and

ii) a second nucleic acid comprising a therapeutic gene of interest; and

iii) at least a first transcription and translational control element for directing expression of said first and second nucleic acid, whereby said first and second nucleic acids are expressed, whereby the expressed CD8 α -chain is associated with the cell membrane of said cell, and whereby a host immune response against said cell is diminished as compared to the immune response against a cell without the CD8 α -chain encoding nucleic acid.

13. **(Withdrawn)** The method according to claim 12, wherein said gene therapy delivery system is selected from the group consisting of a viral expression vector, a plasmid and a naked nucleic acid expression vector.

14. **(Withdrawn)** The method according to claim 13 wherein said viral expression vector is selected from the group consisting of [[of]] a recombinant adenovirus, a recombinant retrovirus, a recombinant adeno-associated virus, and a recombinant herpes virus.

15. **(Withdrawn)** The method according to claim 12 wherein said therapeutic gene of interest is selected from the group consisting of hemoglobin- β , GATA-binding protein, d-aminoevulinate synthase, glucose-6-phosphate-dehydrogenase, Coagulation Factor VIII, Coagulation Factor XI, cystic fibrosis transmembrane conductance regulator, ornithine carbamoyl transferase, α -L-iduronidase, iduronate-2-sulfatase, -glucosidase, α -galactosidase, galactosylceramidase, acid β -glucosidase, hexamidase A, phenylalanine hydroxylase, collagen type IV, $\alpha 5$, Bloom Sundrome Gene Product, and low density lipoprotein receptor.

16. **(Withdrawn)** The method according to claim 12, wherein said nucleic acid encoding CD8 α -chain comprises the sequence set forth in Figure 11 (SEQ ID NO:28).

17. **(Withdrawn)** The method according to claim 12, wherein said nucleic acid encoding CD8 α -chain encodes a protein having a sequence as set forth in Figure 10 (SEQ ID NO:27).